

FILEID**FORPAUSE

J 14

FF	FFFFFFFFFF	000000	RRRRRRRR	PPPPPPPP	AAAAAA	UU	UU	SSSSSSSS	EEEEEEEEE
FF	FFFFFFFFFF	000000	RRRRRRRR	PPPPPPPP	AA	UU	UU	SSSSSSSS	EEEEEEEEE
FF	00	00	RR RR	PP PP	AA AA	UU	UU	SS	EE
FF	00	00	RR RR	PP PP	AA AA	UU	UU	SS	EE
FF	00	00	RR RR	PP PP	AA AA	UU	UU	SS	EE
FF	00	00	RR RR	PP PP	AA AA	UU	UU	SS	EE
FF	00	00	RRRRRRRR	PPPPPPPP	AA AA	UU	UU	SSSSSS	EEEEEEEEE
FF	00	00	RRRRRRRR	PPPPPPPP	AA AA	UU	UU	SSSSSS	EEEEEEEEE
FF	00	00	RR RR	PP	AAAAAAAAAA	UU	UU	SS	EE
FF	00	00	RR RR	PP	AAAAAAAAAA	UU	UU	SS	EE
FF	00	00	RR RR	PP	AA AA	UU	UU	SS	EE
FF	00	00	RR RR	PP	AA AA	UU	UU	SS	EE
FF	000000	000000	RR RR	PP	AA AA	UUUUUUUUUU	UUUUUUUUUU	SSSSSSSS	EEEEEEEEE
FF	000000	000000	RR RR	PP	AA AA	UUUUUUUUUU	UUUUUUUUUU	SSSSSSSS	EEEEEEEEE

LL	LL	IIIIII	SSSSSSSS
LL	LL	IIII	SSSSSSSS
LL	LL	II	SS
LL	LL	II	SS
LL	LL	II	SS
LL	LL	II	SSSSSS
LL	LL	II	SSSSSS
LL	LL	II	SS
LL	LL	II	SS
LL	LL	II	SS
LLLLLLLL	LLLLLLLL	IIIIII	SSSSSSSS
LLLLLLLL	LLLLLLLL	IIIIII	SSSSSSSS

```
1 0001 0 MODULE FOR$PAUSE ( ! FORTRAN PAUSE statement
2 0002 0 IDENT = '1-003' ! File: FORPAUSE.B32 Edit DGP1003
3 0003 0 )
4 0004 1 BEGIN
5
6 0006 1 |
7 0007 1 *****
8 0008 1 *
9 0009 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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26 0026 1 *
27 0027 1 *
28 0028 1 *****
29 0029 1 .
30 0030 1 .
31 0031 1 ++
32 0032 1 * FACILITY: FORTRAN Support Library
33 0033 1 .
34 0034 1 ABSTRACT:
35 0035 1 .
36 0036 1 * FORTRAN PAUSE statement: Output optional string and hibernate
37 0037 1 .
38 0038 1 * ENVIRONMENT: User Mode - AST re-entrant
39 0039 1 .
40 0040 1 * AUTHOR: Thomas N. Hastings, CREATION DATE: 8-Aug-1977
41 0041 1 .
42 0042 1 MODIFIED BY:
43 0043 1 .
44 0044 1 * Thomas N. Hastings, 8-Aug-1977: VERSION 0
45 0045 1 01 - original
46 0046 1 0-4 - Output FORTRAN PAUSE, if no arg. TNH 13-Dec-77.
47 0047 1 0-5 - Change to STARLET library. DGP 20-Apr-78
48 0048 1 0-6 - Change REQUIRE files for VAX system build. DGP 28-Apr-78
49 0049 1 0-7 - Change STARLET to RTLSTARLE to avoid conflicts. DGP 1-May-78
50 0050 1 0-8 - Use SYSSCLI to pause. TNH 7-Jun-78
51 0051 1 0-9 - Make PIC. TNH 30-June-78
52 0052 1 0-10 - Change file name to FORPAUSE.B32, and change the names of
53 0053 1 the REQUIRE file similarly. JBS 14-NOV-78
54 0054 1 1-001 - Update version number and copyright notice. JBS 16-NOV-78
55 0055 1 1-002 - Change REQUIRE file name from FORMAC to OTSMAC. JBS 06-DEC-78
56 0056 1 1-003 - Move ACTUALCOUNT into routine body and initialize class and d_type
57 0057 1 in the default descriptor. DGP 28-Oct-1981
```

FOR\$PAUSE
1-003

; 58 0058 1 !--

L¹⁴
16-Sep-1984 00:41:26 14-Sep-1984 12:32:19 VAX-11 Bliss-32 v4.0-742
[FORRTL.SRC]FORPAUSE.B32;1

Page (1)

F
1

```
60      0059 1 | TABLE OF CONTENTS:  
61      0060 1 |  
62      0061 1 |  
63      0062 1 |  
64      0063 1 | FORWARD ROUTINE  
65      0064 1 | FOR$PAUSE:           ! PAUSE statement  
66      0065 1 |  
67      0066 1 |  
68      0067 1 | INCLUDE FILES:  
69      0068 1 |  
70      0069 1 REQUIRE 'RTLIN:OTSMAC';       ! macros  
71      0263 1 REQUIRE 'RTLIN:RTLPSECT';   ! Define DECLARE_PSECTS macro  
72      0358 1 LIBRARY 'RTLSTARLE';     ! STARLET library for macros and symbols  
73      0359 1 |  
74      0360 1 | MACROS:  
75      0361 1 |  
76      0362 1 |  
77      0363 1 |  
78      0364 1 | EQUATED SYMBOLS:  
79      0365 1 |  
80      0366 1 |  
81      0367 1 |  
82      0368 1 | PSECT DECLARATIONS:  
83      0369 1 |  
84      0370 1 |  
85      0371 1     DECLARE_PSECTS (FOR);      ! declare PSECTs for FOR$ facility  
86      0372 1 |  
87      0373 1 |  
88      0374 1 | OWN STORAGE:  
89      0375 1 |  
90      0376 1 |  
91      0377 1 |  
92      0378 1 | EXTERNAL REFERENCES:  
93      0379 1 |  
94      0380 1 |  
95      0381 1 | EXTERNAL ROUTINE  
96      0382 1     SYSSCLI: ADDRESSING_MODE(GENERAL);    ! Call command language interpreter (CLI)  
97      0383 1     LIB$PUT_OUTPUT: NOVALUE ADDRESSING_MODE(GENERAL); ! Output on device $OUTPUT
```

```

99      0384 1 GLOBAL ROUTINE FOR$PAUSE (           ! FORTRAN PAUSE statement
100     0385 1           MESSAGE)          ! Adr. of optional string descriptor to output
101     0386 1           =                   ! Value returned is $SUSPND completion code
102     0387 1           ++
103     0388 1           FUNCTIONAL DESCRIPTION:
104     0389 1
105     0390 1           FORTRAN PAUSE outputs an optional string on device $OUTPUT
106     0391 1           and then calls CLI to pause which puts users back at command level.
107     0392 1           If no parameter is given, 'FORTRAN PAUSE' is output.
108     0393 1
109     0394 1           FORMAL PARAMETERS:
110     0395 1
111     0396 1           MESSAGE.rt.dx          ! Adr. of optional string descriptor to output
112     0397 1
113     0398 1           IMPLICIT INPUTS:
114     0399 1
115     0400 1           Logical device assignment for $OUTPUT (see LIB$PUT_OUTPUT)
116     0401 1
117     0402 1           IMPLICIT OUTPUTS:
118     0403 1
119     0404 1           NONE
120     0405 1
121     0406 1           COMPLETION CODES:
122     0407 1
123     0408 1           Operating system completion status on SYSSCLI directive
124     0409 1
125     0410 1           SIDE EFFECTS:
126     0411 1
127     0412 1           Outputs message on device $OUTPUT and calls SYSSCLI pause function.
128     0413 1
129     0414 1
130     0415 1
131     0416 2           --
132     0417 2           BEGIN
133     0418 2
134     0419 2           BUILTIN
135     0420 2           ACTUALCOUNT;        ! Return the number of actual parameters
136     0421 2           LOCAL T;
137     0422 2           DESCR: DSC$DESCRIPTOR;    ! descriptor (needed to be PIC)
138     0423 2
139     0424 2           IF ACTUALCOUNT() GEQ 1
140     0425 2           THEN
141     0426 2           LIB$PUT_OUTPUT (.MESSAGE)
142     0427 3           ELSE
143     0428 3           BEGIN
144     0429 3           DESCR[DSC$B_CLASS] = DSC$K_CLASS_S;
145     0430 3           DESCR[DSC$B_DTYPE] = DSC$K_DTYPE_T;
146     0431 3           DESCR[DSC$W_LENGTH] = 13;
147     0432 3           DESCR[DSC$A_POINTER] = UPLIT ('FORTRAN PAUSE');
148     0433 2           LIB$PUT_OUTPUT (DESCR);
149     0434 2           END;
150     0435 2           T = CLISK_CLISERV + CLISK_PAUSE*256;
151     0436 2           RETURN SYSSCLI (T)::;
152     0437 1           END;                  ! End of routine FOR$PAUSE

```

.TITLE FOR\$PAUSE

```

        .IDENT  \1-003\

        .PSECT  _FOR$CODE,NOWRT, SHR, PIC.2
00 00 45 53 55 41 50 20 4E 41 52 54 52 4F 46 00000 P.AAA: .ASCII  \FORTRAN PAUSE\<0><0><0>
00 0000F

        .EXTRN  SYSSCLI, LIB$PUT_OUTPUT

        SE      0000 00000 .ENTRY  FOR$PAUSE, Save nothing : 0384
          0C C2 00002 SUBL2 #12, SP
          6C 95 00005 TSTB (AP)
          05 13 00007 BEQL 1S
        04  AC  DD 00009 PUSHL MESSAGE : 0423
          10 11 0000C BRB   2S
        04 AE 010E000D 8F D0 0000E 1$: MOVL #17694733, DESCRIPTOR : 0425
        08 AE           D7 AF 9E 00016 MOVAB P.AAA, DESCRIPTOR+4 : 0430
          04 AE 9F 0001B PUSHAB DESCRIPTOR : 0431
00000000G 00           01 FB 0001E 2$: CALLS #1, LIB$PUT_OUTPUT : 0432
          6E 0105 8F 3C 00025 MOVZWL #261, T
          5E DD 0002A PUSHL SP : 0435
00000000G 00           01 FB 0002C CALLS #1, SYSSCLI : 0436
          04 00033 RET : 0437
:
```

; Routine Size: 52 bytes, Routine Base: _FOR\$CODE + 0010

; 153 0438 1 END ! End of module FOR\$PAUSE
; 154 0439 0 FLUDOM

PSECT SUMMARY

Name	Bytes	Attributes
_FOR\$CODE	68	NOVEC,NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
\$_255\$DUA28:[SYSLIB]STARLET.L32;1	9776	8	0	581	00:01.0

COMMAND QUALIFIERS

. BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LISS:FORPAUSE/OBJ=OBJ\$:FORPAUSE MSRC\$:FORPAUSE/UPDATE=(ENH\$:FORPAUSE)

: Size: 52 code + 16 data bytes
: Run Time: 00:04:6
: Elapsed Time: 00:13:8
: Lines/CPU Min: 5763
: Lexemes/CPU-Min: 21676
: Memory Used: 50 pages
: Compilation Complete

0182 AH-BT13A-SE
VAX/VMS V4.0

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